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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/392,947	09/09/1999	STEPHEN JOE MYERS	H-204258	2048

7590

05/27/2003

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EXAMINER

TRAN, HIEN THII

ART UNIT

PAPER NUMBER

1764

DATE MAILED: 05/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/392,947

Applicant(s)

MYERS, STEPHEN JOE

Examiner

Hien Tran

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 March 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12, 14 and 23-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14 and 23-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-12, 14, 23-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 4 "extreme" is a relative term and does not clearly set forth the metes and bounds of the patent protection desired and therefore renders the claim vague and indefinite. See claim 24 likewise.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-8, 10, 23-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Otani et al (4,413,392).

Otani et al '392 discloses a catalytic converter comprising: a catalyst 21; a first end plate 36 positioned adjacent to a first end portion of said catalyst 21, said first end plate 36 defining a first end of the converter and comprising a first endplate support mechanism extending perpendicularly therefrom toward said catalyst 12 (Fig. 6); a mat support 23, 23a substantially covering said catalyst 21 and a portion of the first endplate support mechanism; and a shell 19

Art Unit: 1764

having a diameter greater than that of the first end plate wherein said shell 19 is disposed around said catalyst 21 and said mat support 23, and is disposed around and in intimate contact with at least a portion of said first end plate 36.

With respect to claims 29-30, Otani et al '392 discloses that the first end plate including end plate and a portion of endplate being disposed in spaced relation to the first end portion of the catalyst.

With respect to claims 31-32, Otani et al '392 discloses that the first and second endplates are flat.

Instant claims 1-8, 10, 23-32 structurally read on the apparatus of Otani et al '392.

5. Claims 1-8, 10, 14, 23-27, 29-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Otani et al (4,581,206).

Otani et al '206 discloses a catalytic converter comprising: a catalyst 28; a first end plate 52 positioned adjacent to a first end portion of said catalyst 28, said first end plate 52 forming a first end of the converter and comprising a first endplate support mechanism extending perpendicularly therefrom toward said catalyst 28 (Fig. 2); a mat support 40, 44 substantially covering said catalyst 28 and a portion of the first endplate support mechanism; and a shell 32 having a diameter greater than that of the first end plate wherein said shell 32 is disposed around said catalyst 28 and said mat support 40, 44, and is disposed around and in intimate contact with at least a portion of said first end plate 52.

With respect to claims 29-30, Otani et al '206 discloses that the first end plate including end plate and a portion of endplate being disposed in spaced relation to the first end portion of the catalyst.

Art Unit: 1764

With respect to claims 31-32, Otani et al '206 discloses that the first and second endplates are flat.

Instant claims 1-8, 10, 14, 23-27, 29-32 structurally read on the apparatus of Otani et al '206.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otani et al (4,413,392 or 4,581,206) in view of either Hass (3,832,443) or Keith et al (3,441,381).

Keith et al and Hass disclose the conventionality of providing a three-way catalyst.

It would have been obvious to one having ordinary skill in the art to substitute the catalyst of either Keith et al or Hass for the catalyst of either reference of Otani et al for the known and expected results of obtaining the same results in the absence of unexpected results.

Art Unit: 1764

9. Claims 4, 9, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otani et al (4,413,392).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the ring and the endplate in two pieces and welded together, since it has been held that forming in two pieces an article which has formerly been formed in one piece involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

It would have been obvious to one having ordinary skill in the art to extend the shell to the entire periphery of the end plate since it has been held that where the general conditions of a claim are disclosed in the prior art, merely discovering the relative dimension involves only routine skill in the art. *In re Gardner v. TEC systems, Inc.* 725 F.2d 1338, 220 USPQ 777.

10. Claims 4, 9, 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Otani et al (4,581,206).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the ring and the endplate in two pieces and welded together, since it has been held that forming in two pieces an article which has formerly been formed in one piece involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

It would have been obvious to one having ordinary skill in the art to extend the shell to halfway across the periphery of the end plate since it has been held that where the general conditions of a claim are disclosed in the prior art, merely discovering the relative dimension involves only routine skill in the art. *In re Gardner v. TEC systems, Inc.* 725 F.2d 1338, 220 USPQ 777.

Art Unit: 1764

***Response to Arguments***

11. Applicant's arguments with respect to claims 1-12, 14, 23-32 have been considered but are moot in view of the new ground(s) of rejection.

Applicants argue that Keith et al and Hass do not teach end plates. Such contention is not persuasive as the primary references is relied upon for such teaching. Note that Keith et al and Hass are only relied upon for teaching the specific type of the catalyst material as set forth in the above rejections.

***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

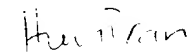
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien Tran whose telephone number is 308-4253. The examiner can normally be reached on Tuesday-Friday from 7:30AM-6:00PM.

Art Unit: 1764

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0661.

HT  
May 23, 2003



**Hien Tran**  
**Primary Examiner**  
**Art Unit 1764**